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EXAMINER	
LEE, CHUN KUAN	

ART UNIT	PAPER NUMBER
2181	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/582,808	SCHAETZLE, RALF	
	Examiner	Art Unit	
	Chun-Kuan Lee	2181	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *11 December 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-19* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-19* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *14 June 2006* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

RESPONSE TO ARGUMENTS

1. Applicant's arguments filed 12/11/2008 have been fully considered but they are not persuasive. Currently, claims 1-19 are pending for examination.

2. In response to applicant's arguments (on page 7, 2nd paragraph) with regard to the independent claim 1 rejected under 35 U.S.C. 103(a) that the combination of the references does not teach/suggest the "broadcast" claimed feature because Andreas do not teach/suggest all clients are addressed by the server at the same time in a parallel manner; applicant's arguments have fully been considered, but are not found to be persuasive.

Please note that the features upon which applicant relies (i.e., all clients are addressed by the server at the same time in a parallel manner) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

3. In response to applicant's arguments (on page 7, last paragraph) with regard to the independent claim 1 rejected under 35 U.S.C. 103(a) that the combination of the references does not teach/suggest the claimed invention that the slaves do not change

a value transmitted from the server and do not transmit it to other clients; applicant's arguments have fully been considered, but are not found to be persuasive.

Please note that the features upon which applicant relies (i.e., the slaves do not change a value transmitted from the server and do not transmit it to other clients) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

4. In response to applicant's arguments (on page 8, 1st paragraph) with regard to the independent claim 1 rejected under 35 U.S.C. 103(a) that Andreas teaches away from changing of identical addresses to a unique address, because Andreas teaches instead of assigning an individual unique static address to each serial device for comparison with a channel identifier communicated to all the serial devices, the device use the same common pre-determined value for comparison with a received channel identifier (col. 1, l. 65 to col. 2, l. 2); applicant's arguments have fully been considered, but are not found to be persuasive.

The examiner respectfully disagrees, because from applicant's above citation, Andreas does not seem to teach/suggest that the resulting combination of the references would not function technologically; as applicant's above citation of Andreas seems to teach that instead of having a static addressing scheme, the unique address for each service devices is dynamically assigned.

5. As per claims 2-19, claims 2-19 are unpatentable at least for the same reasons as discussed above in regard to claim 1.

6. In responding to all applicant's arguments, the examiner will maintain his position and the current rejection of record.

I. REJECTIONS BASED ON PRIOR ART

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over "HART, Field Communication Protocol, Application Guide" in view of Andreas et al. (US Patent 6,928,501) and Brooke (US Patent 5,909,591).

HART, Field Communication Protocol, Application Guide teaches a method of configuring a HART multidrop system, the system including at least one master device and a plurality of slave devices coupled to a master device (Fig. 8, on p. 22 and Fig. 9, on p. 23), the method comprising the steps of:

connecting the slave devices (Fig. 8, on p. 22 and Fig. 9, on p. 23);

switching on a power source of the at least one master device for the slave devices (Fig. 8, on p. 22; Fig. 9, on p. 23 and HART Multidrop Networks on pp. 22-23), as the power source must be switch on in order for the system to operate;

a HART command "Write polling address" (Universal Commands of Table 1 on p. 7);

setting a polling address not equal to zero (HART Multidrop Networks on pp. 22-23); and

the HART command being preprogrammed to cause the slave devices automatically switch to a multidrop mode (HART Multidrop Networks on pp. 22-23), as the standard HART command transferred in the multidrop system would initiates the operation in the multidrop mode.

HART, Field Communication Protocol, Application Guide does not expressly teach the method comprising: transmitting the HART command ... , obtain an identical address not equal to zero; and changing the identical addresses for the slave devices to a unique address for each slave device.

Andreas a system and a method with a plurality of slave devices each have a unique identifier comprising:

transmitting addressing data to each module (Fig. 1, ref. 120-150) via broadcasting from at least one controller (Fig. 1, ref. 110) (col. 2, l. 63 to col. 3, l. 27 and col. 4, ll. 44-50), in combination with the above HART, Field Communication Protocol, Application Guide's teaching, the HART command would be broadcast;

obtaining an identical address (e.g. identical CID) not equal to zero (col. 2, l. 63 to col. 3, l. 27 and col. 4, ll. 44-50), in combination with the above HART, Field Communication Protocol, Application Guide's teaching, as the broadcasted polling address is not equal to zero;

accessing the modules utilizing a unique address (e.g. unique device selection signal) for each module (col. 2, l. 63 to col. 3, l. 27 and col. 4, ll. 44-50); and

changing received address to a unique address for a module (col. 3, l. 28 to col. 4, l. 12).

Brooke teaches an automatic system and method comprising changing addresses for the modules to a unique address for each module (col. 2, ll. 19-53), in combination with Andreas' teaching, the identical address is changed to the unique address for accessing.

It would have been obvious for one of ordinary skill in this art, at the time of invention was made to include Andreas' broadcasting and Brooke's assigning of unique addresses into HART, Field Communication Protocol, Application Guide's multidrop network for the benefit of for properly identifying the data's intended recipient (Andreas, col. 3, ll. 25-27) and address detection and assignment without prior configuration (Brooke, col. 2, ll. 4-16) to obtain the invention as specified in claim 1.

8. Claims 2-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over "HART, Field Communication Protocol, Application Guide" in view of "About HART: Part 1," Andreas et al. (US Patent 6,928,501) and Brooke (US Patent 5,909,591).

9. As per claim 2, HART, Field Communication Protocol, Application Guide teaches a method of configuring an existing HART multidrop system, the system including (i) a master device, (ii) a plurality of slave devices connected to the at least one master device, and (iii) at least one further slave device (e.g. replacement device) (Fig. 8, on p. 22; Fig. 9, on p. 23 and Improvement Plant Operations on p. 12), the method comprising the steps of:

connecting the at least one further slave device (Fig. 8, on p. 22; Fig. 9, on p. 23 and Improvement Plant Operations on p. 12), as the replacement device is connected,

switching on a power source for the slave devices (Fig. 8, on p. 22; Fig. 9, on p. 23 and HART Multidrop Networks on pp. 22-23), as the power source must be switch on in order for the system to operate;

a HART command "Write polling address" (Universal Commands of Table 1 on p. 7);

setting a polling address not equal to zero (HART Multidrop Networks on pp. 22-23); and

the HART command being preprogrammed to cause the slave devices automatically switch to a multidrop mode (HART Multidrop Networks on pp. 22-23), as the standard HART command transferred in the multidrop system would initiates the operation in the multidrop mode.

HART, Field Communication Protocol, Application Guide does not expressly teach the method comprising: switching off a power source ... ; transmitting the HART command ... , obtain an identical address not equal to zero; and changing the identical addresses for the slave devices to a unique address for each slave device.

About HART: Part 1 teaches a system and a method of adding slave device (e.g. Field Instrument) comprising resetting of the system as the devices are resetted (page 10), wherein the resetting would include the switching off of the power source following by the switching on of the power source.

It would have been obvious for one of ordinary skill in this art, at the time of invention was made to include About HART: Part 1's resetting into HART, Field Communication Protocol, Application Guide's multidrop system for the benefit of properly operating the system in accordance to the HART communication protocol to enable proper communication and operation of the devices within the HART system as to obtain the invention as specified in claim 2.

HART, Field Communication Protocol, Application Guide and About HART: Part 1 do not expressly teach the method comprising: transmitting the HART command ... , obtain an identical address not equal to zero; and changing the identical addresses for the slave devices to a unique address for each slave device.

Andreas a system and a method with a plurality of slave devices each have a unique identifier comprising:

transmitting addressing data to each module (Fig. 1, ref. 120-150) via broadcasting from at least one controller (Fig. 1, ref. 110) (col. 2, l. 63 to col. 3, l. 27 and col. 4, ll. 44-50), in combination with the above HART, Field Communication Protocol, Application Guide's teaching, the HART command would be broadcast;

obtaining an identical address (e.g. identical CID) not equal to zero (col. 2, l. 63 to col. 3, l. 27 and col. 4, ll. 44-50), in combination with the above HART, Field Communication Protocol, Application Guide's teaching, as the broadcasted polling address is not equal to zero;

accessing the modules utilizing a unique address (e.g. unique device selection signal) for each module (col. 2, l. 63 to col. 3, l. 27 and col. 4, ll. 44-50) ; and

changing received address to a unique address for a module (col. 3, l. 28 to col. 4, l. 12).

Brooke teaches an automatic system and method comprising changing addresses for the modules to a unique address for each module (col. 2, ll. 19-53), in combination with Andreas' teaching, the identical address is changed to the unique address for accessing.

It would have been obvious for one of ordinary skill in this art, at the time of invention was made to include Andreas' broadcasting and Brooke's assigning of unique addresses into HART, Field Communication Protocol, Application Guide's multidrop network for the benefit of for properly identifying the data's intended recipient (Andreas, col. 3, ll. 25-27) and address detection and assignment without prior configuration (Brooke, col. 2, ll. 4-16) to obtain the invention as specified in claim 2.

10. As per claim 11, HART, Field Communication Protocol, Application Guide teaches a HART multidrop system, comprising:

a plurality of slave devices (Fig. 8, on p. 22; Fig. 9, on p. 23 and HART Multidrop Networks on pp. 22-23); and

a master device having a power source for the slave devices, the slave devices being coupled to the at least one master device (Fig. 8, on p. 22; Fig. 9, on p. 23 and HART Multidrop Networks on pp. 22-23);

a control unit switching on the power source (Fig. 8, on p. 22; Fig. 9, on p. 23 and HART Multidrop Networks on pp. 22-23), as the power source must be switch on in order for the system to operate;

a HART command "Write polling address" (Universal Commands of Table 1 on p. 7);

setting a polling address not equal to zero (HART Multidrop Networks on pp. 22-23); and

the HART command causing each of the slave devices connected to the at least one master device to be automatically switched to a multidrop mode (HART Multidrop Networks on pp. 22-23), as the standard HART command transferred in the multidrop system would initiates the operation in the multidrop mode.

HART, Field Communication Protocol, Application Guide does not expressly teach the method comprising: automatic configuration of the HART multidrop system;

transmitting the HART command ... , receive an identical address not equal to zero; the identical addresses for the slave devices capable of being changed to individual addresses for each slave device; and wherein the power source is switched off before switching on the power source.

About HART: Part 1 teaches a system and a method of adding slave device (e.g. Field Instrument) comprising resetting of the system as the devices are resetted (page 10).

It would have been obvious for one of ordinary skill in this art, at the time of invention was made to include About HART: Part 1's resetting into HART, Field Communication Protocol, Application Guide's multidrop system for the benefit of properly operating the system in accordance to the HART communication protocol to enable proper communication and operation of the devices within the HART system as to obtain the invention as specified in claim 11.

HART, Field Communication Protocol, Application Guide and About HART: Part 1 do not expressly teach the method comprising: automatic configuration of the HART multidrop system; transmitting the HART command ... , receive an identical address not equal to zero; and the identical addresses for the slave devices capable of being changed to individual addresses for each slave device.

Andreas a system and a method with a plurality of slave devices each have a unique identifier comprising:

transmitting addressing data to each module (Fig. 1, ref. 120-150) via broadcasting from at least one controller (Fig. 1, ref. 110) (col. 2, l. 63 to col. 3, l. 27 and col. 4, ll. 44-50), in combination with the above HART, Field Communication Protocol, Application Guide's teaching, the HART command would be broadcast;

obtaining an identical address (e.g. identical CID) not equal to zero (col. 2, l. 63 to col. 3, l. 27 and col. 4, ll. 44-50), in combination with the above HART, Field Communication Protocol, Application Guide's teaching, as the broadcasted polling address is not equal to zero;

accessing the modules utilizing a unique address (e.g. unique device selection signal) for each module (col. 2, l. 63 to col. 3, l. 27 and col. 4, ll. 44-50) ; and

changing received address to a unique address for a module (col. 3, l. 28 to col. 4, l. 12).

Brooke teaches an automatic system and method comprising: automatic configuration of the system (e.g. HART multidrop system) (col. 2, ll. 12-16); and addresses for the slave devices capable of being changed to individual addresses for each slave device (col. 2, ll. 19-53), in combination with Andreas' teaching, the identical address is changed to the unique address for accessing.

It would have been obvious for one of ordinary skill in this art, at the time of invention was made to include Andreas' broadcasting and Brooke's assigning of unique addresses into HART, Field Communication Protocol, Application Guide's multidrop network for the benefit of for properly identifying the data's intended recipient (Andreas,

col. 3, ll. 25-27) and address detection and assignment without prior configuration (Brooke, col. 2, ll. 4-16) to obtain the invention as specified in claim 11.

11. As per claims 3 and 12, HART, Field Communication Protocol, Application Guide, About HART: Part 1, Andreas and Brooke teach all the limitations of claims 2 and 11 as discussed above, where About HART: Part 1 further teaches the method and the system comprising before the switching off step (before the power supply is switched on), the control unit (e.g. HART controller) check if one of a supply voltage or a supply current for the slave devices is about zero (About HART: Part 1, Fig. 1.2 on p. 3), as the HART controller could have been utilized to sense the current level for properly implementing the resetting (e.g. On-Off-On).

12. As per claims 4 and 13, HART, Field Communication Protocol, Application Guide, About HART: Part 1, Andreas and Brooke teach all the limitations of claims 2 and 11 as discussed above, where About HART: Part 1 further teaches the method and the system comprising wherein switching on step is performed by the control unit after a predetermined time interval after the switching off step (a switch off process) to ensure that one of a voltage and a current is not applied to the slave devices before the power source for the slave devices is switched on (About HART: Part 1, page 10), it would have been necessary to switch off for predetermined time interval to ensure that all the voltage or current in the system is sufficiently discharged for implementing the reset.

13. As per claim 5, HART, Field Communication Protocol, Application Guide, About HART: Part 1, Andreas and Brooke teach all the limitations of claim 2 as discussed above, where About HART: Part 1 further teaches the method comprising wherein, in the HART command, the pulling address has a value between 1 and 15 (e.g. 4 bit address) (About HART: Part 1, Overview: Addressing on pp. 13-14).

14. As per claims 6 and 14, HART, Field Communication Protocol, Application Guide, About HART: Part 1, Andreas and Brooke teach all the limitations of claims 2 and 11 as discussed above, where About HART: Part 1 and Brooke further teach the method and the system comprising wherein one of the transmitting step and the changing step, the unique address between 1 and 15 (e.g. 4 bit address) is entered for each slave device by an operator in an inquiry routine run by the control unit (About HART: Part 1, Overview: Addressing on pp. 13-14 and Brooke, col. 2, ll. 1-3).

15. As per claims 7 and 15, HART, Field Communication Protocol, Application Guide, About HART: Part 1, Andreas and Brooke teach all the limitations of claims 6 and 14 as discussed above, where Brooke further teaches the method and the system comprising wherein before entering of the unique address for a particular slave device, the control unit run a checking routine to determine if the particular slave device has already been configured and, if the particular slave device has been configured, the same address is again assigned to the particular slave device (Brooke, col. 2, ll. 19-53),

wherein the above detection would have been implemented via the monitoring of the particular slave device for a faster configuration process.

16. As per claims 8 and 16, HART, Field Communication Protocol, Application Guide, About HART: Part 1, Andreas and Brooke teach all the limitations of claims 7 and 15 as discussed above, where About HART: Part 1 and Brooke further teach the method and the system comprising wherein the checking routine involves the HART command being transmitted with an identifier for the particular slave device and a previously assigned address (About HART: Part 1, Overview: Addressing on pp. 13-14 and Brooke, col. 2, ll. 19-53), as the HART command would have been transferred with the existing addressing information including the identifier and the previous assigned address.

17. As per claims 9 and 17, HART, Field Communication Protocol, Application Guide, About HART: Part 1, Andreas and Brooke teach all the limitations of claims 6 and 14 as discussed above, where About HART: Part 1 further teaches the method and the system comprising wherein, in addition to entering the unique address for a particular slave device, an identifier corresponding to the particular slave device (e.g. serial number) is entered (About HART: Part 1, Overview: Addressing on pp. 13-14).

18. As per claims 10 and 18, HART, Field Communication Protocol, Application Guide, About HART: Part 1, Andreas and Brooke teach all the limitations of claims 9

and 17 as discussed above, where About HART: Part 1 further teaches the method and the system comprising wherein the identifier characterizing the particular device is a corresponding serial number of the particular slave device (About HART: Part 1, Overview: Addressing on pp. 13-14).

19. As per claim 19, HART, Field Communication Protocol, Application Guide, About HART: Part 1, Andreas and Brooke teach all the limitations of claim 11 as discussed above, where About HART: Part 1 further teaches the system comprising wherein, before switching on the power source, the power source is switched off (About HART: Part 1, page 10), as the resetting would include power source is switched off before switching on the power source.

II. CLOSING COMMENTS

Conclusion

a. STATUS OF CLAIMS IN THE APPLICATION

The following is a summary of the treatment and status of all claims in the application as recommended by **M.P.E.P. 707.07(i)**:

a(1) CLAIMS REJECTED IN THE APPLICATION

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

b. DIRECTION OF FUTURE CORRESPONDENCES

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chun-Kuan (Mike) Lee whose telephone number is (571) 272-0671. The examiner can normally be reached on 8AM to 5PM.

IMPORTANT NOTE

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Alford Kindred can be reached on (571) 272-4037. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/C.K.L./

April 03, 2009

Chun-Kuan (Mike) Lee
Examiner
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/Alford W. Kindred/

Supervisory Patent Examiner, Art Unit 2181